

REMARKS

Claims 1-38 were pending. All were rejected. The Applicants have cancelled claims 1-7, amended claims 8, 9, 10 and 34 and added new claims 39-43. Therefore, claims 8-43 are presently pending. The Applicants request further consideration and re-examination in view of the amendments above and remarks set forth below.

The Advisory Action indicates that the amendment presented in response to the final rejection was denied entry on the grounds that it raised new issues and/or raised the issue of new matter. Because these amendments are presented again here and new claims are added, it would be improper to for a first action issued in response to this amendment to be made final. Manual of Patent Examining Procedure, Section 706.07(b).

Claim Objection:

Claim 34 was objected to under 37 CFR 1.75(c) as being of improper dependent form.

Claim 34 has been amended to be in proper dependent form. Particularly, claim 34 now recites that the method is performed by a portable device.

Rejections under 35 U.S.C. § 102:

Claims 1-5, 7-13, and 18-23 are rejected as being anticipated by International Publication No. WO 98/12670 by Borza et al. ("Borza").

Claims 1-5 and 7 have been cancelled. As to claims 8-13 and 18-23, the Applicants overcome the rejection by amendment.

The present invention as recited in claim 8 is directed toward a method of authenticating the identity of a person. Samples of biometric data are obtained from the person and a baseline profile is formed from the biometric samples. Additional biometric data is repeatedly obtained from the person in response to the person accessing a portable device for information. The additional data is compared to the baseline profile for authenticating identity of the person and a response is developed to the comparing. The Applicants have amended claim 8 to require that the information for which the person accesses the device comprises time of day.

This method achieves significant advantages over prior authentication methods. For example, images of the wearer may be captured while the wearer is viewing the display of the device to obtain the time of day information. Applicants'

specification at page 11, line 31, to page 12, line 11. It is expected that the person will have his or her face positioned in front of the device in order to observe the displayed information. Applicants' specification at page 12, lines 1-2. It is also expected that the images taken in this manner will exhibit consistency in the orientation of the device with respect the wearer, for example, in distance and angle. Applicants' specification at page 12, lines 5-7. As a result, the confidence in the results in the authenticating the user's identity are increased without the user having to take any special steps or even be aware that user is having his or her image captured. Applicants' specification at page 12, lines 7-9.

Borza does not suggest or disclose such a combination of features. Borza is directed toward a biometric identification system that includes a transmitting module in the form of a wristwatch that is provided with a fingerprint reader. At page 8, lines 16-17 and in Figs. 2, 3 and 4, Borza illustrates and describes in detail how fingerprint scanning is accomplished through a biometric sensor in the form of a matrix of sensing elements. Particularly, an array of sensing elements is provided in which the elements are spaced so that an image of a fingerprint, once scanned, contains all of the required features for analysis. Each sensing element includes a charge-sensing electrode. An over-glass is provided upon which the user's finger is placed to induce charges in the sensing electrodes.

In the wristwatch embodiment of Borza shown in Figs. 5a and 5b, the array of sensing elements are provided on the face of a wristwatch. The array of sensing elements is offset from the time display means or is superimposed upon the time display means. In one embodiment, Borza discloses that the hands of an analog watch are designed to be visible through or between the pads of the sensing elements. Borza, at page 11, line 1 to page 12, line 25.

Borza states that the biometric sensor of the wristwatch embodiment is of the form described and shown in Figs. 2, 3 and 4 or is a conventional capacitive fingerprint scanner. Borza at page 11, lines 16-18. Borza also states, "[f]urther alternatively, the biometric sensing means 53 is an optical biometric scanning device in the form of a retinal scanner, an optical fingerprint scanner, an optical palm scanner, or an other suitable (and portable) biometric sensing device. Borza at page 11, lines 18-21.

However, Borza does not provide any disclosure as to when or how these other embodiments could be used to obtain biometric samples. Thus, Borza cannot

suggest or disclose the limitation of claim 8 in which biometric data is obtained when the person accesses the device for time of day information. Rather, in the fingerprint scanner embodiment of Borza, which is the only embodiment that is explained in any detail, the display would be at least partially obscured when the user's finger is placed on the over-glass, since the fingerprint sensor is located on the face of the wristwatch.

Regarding Borza, the Examiner stated that "Retinal Scan described on Page 11, lines 18-22 can occur when user is either obtaining the time from looking at the watch or performing something as simple as trying to obtain information on whether he/she is being authorized by the device." (Emphasis added). The Examiner, however, is not applying the correct legal standard for anticipation or inherency under 35 U.S.C. §§ 102-103. As is stated in Section 2112 of the Manual of Patent Examining Procedure (MPEP), "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (Emphasis in original), citing *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); and *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). In this same section, the MPEP further states that "[t]o establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" quoting *In re Robertson*, 169 F.2d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Further, even assuming the examiner were correct in that Borza can obtain samples "when user is either obtaining the time from looking at the watch or performing something as simple as trying to obtain information on whether he/she is being authorized by the device," this still does not suggest or disclose the Applicants' claim 8. The difference is that claim 8 requires that the biometric samples are obtained in response to the person accessing the device for the time of day information. The mere possibility that Borza might obtain samples when the user is obtaining the time is not sufficient to suggest that the samples are obtained in response to obtaining the time, as required by claim 8.

Thus, the Examiner's reasoning that the limitations of claim 8 can occur in reference to Borza is both legally and factually insufficient to support the rejection of claim 8.

The Examiner states that these features of the Applicants' invention which distinguish claim 8 from the prior art are not supported by the Applicants' specification. This is incorrect. As mentioned above, these features are described in detail at least at page 11, line 31 to page 12, line 11 of the Applicants' specification and are recited in claims 8 and 9 as originally filed.

For at least the reasons given above, claim 8 is allowable over Borza. Claims 9-13 and 18-23 are allowable at least because they depend from an allowable base claim 8.

Claim 9 has been amended to recite that the step of accessing comprises the person pressing a button on the portable device. This limitation is supported by the Applicant's specification at least at page 11, line 31 to page 12, line 11 and at page 14, lines 11-15. Borza does not suggest or disclose such a feature. This is another reason why claim 9 is allowable.

Rejections under 35 U.S.C. § 103:

Claims 6 and 14-17 are rejected as being obvious over Borza in view of Borman et al.

Claim 6 has been cancelled. The Applicants respectfully traverse the rejection as to claims 14-17. Claims 14-17 are dependent from claim 8. As explained above, claim 8 is allowable over Borza at least because claim 8 requires obtaining biometric samples in response to a person accessing a device for time of day information, whereas, Borza does not suggest or disclose such a feature. This feature is also not suggested or disclosed by Borman et al. Accordingly, claim 8 is allowable over Borza and Borman et al. taken singly, or in combination. Therefore, claims 6 and 14-17 are allowable at least because they are dependent from claim 8.

Claims 11 and 12 are rejected as being obvious over Borza in view of Bergholz et al.

The Applicants respectfully traverse the rejection. Claims 11 and 12 are dependent from claim 8. As explained above, claim 8 is allowable over Borza at least because claim 8 requires obtaining biometric samples in response to a person accessing a device for time of day information, whereas, Borza does not suggest or disclose such a feature. This feature is also not suggested or disclosed by Bergholz et al. Accordingly, claim 8 is allowable over Borza and Bergholz et al. taken singly, or

in combination. Therefore, claims 11 and 12 are allowable at least because they are dependent from claim 8.

Claims 24-26 are rejected as being obvious over Borza in view of Bergholz et al. and further in view of Carroll et al.

The Applicants respectfully traverse the rejection. Claims 24-26 are dependent from claim 8. As explained above, claim 8 is allowable over Borza at least because claim 8 requires obtaining biometric samples in response to a person accessing a device for time of day information, whereas, Borza does not suggest or disclose such a feature. This feature is also not suggested or disclosed by Bergholz et al. or Carroll et al. Accordingly, claim 8 is allowable over Borza, Bergholz et al. and Carroll et al. taken singly, or in combination. Therefore, claims 24-26 are allowable at least because they are dependent from claim 8.

Further, the Applicants respectfully submit that Carroll cannot be properly combined with Borza and Bergholz et al. for the reasons given in the Applicants' response filed on April 20, 2004. This is another reason why claims 24-26 are allowable.

Claims 29-38 are rejected as being obvious over Borza in view of Freedman.

The Applicants respectfully traverse the rejection. Claim 29 is dependent from claim 8. As explained above, claim 8 is allowable over Borza at least because claim 8 requires obtaining biometric samples in response to a person accessing a device for information, whereas, Borza does not suggest or disclose such a feature. This feature is also not suggested or disclosed by Freedman. Accordingly, claim 8 is allowable over Borza and Freedman taken singly, or in combination. Therefore, claim 29 is allowable at least because it is dependent from claim 8.

Further, regarding claim 29, the Examiner stated that Freedman at col. 3, lines 43-52 teaches updating the baseline sample by additional biometric data when the additional biometric data successfully authenticates the identity of the person.

However, claim 8, from which claim 29 depends, recites that the additional data is compared to the baseline profile for authenticating the identity of the person, while claim 29 recites updating the baseline sample by the additional biometric data when the additional biometric data successfully authenticates the identity of the person. This combination of features allows the baseline profile to be continuously updated, automatically incorporating new images and other sampled data into the

baseline profile so that the baseline profile evolves over time in response to changes in the person over time. Applicants' specification at page 13, lines 27-34.

In contrast, Freedman is directed toward selection of biometric fingerprint samples to serve as a sample reference. Freedman, at col. 2, lines 54-56. Freedman also teaches the use for comparison of samples taken from individuals other than the person to be authenticated but whose biometric information is similar to that of the identified individual in order to detect false matches. Freedman, at col. 13, lines 25-45. The passage of Freedman at col. 3, lines 38-52 cited by the Examiner is in fact directed to this aspect of Freedman in which samples indicative of false matches are identified from within a database of many samples.

This passage of Freedman at col. 3, lines 38-53 is repeated below:

In accordance with the invention there is provided a method of identifying comparisons indicative of potential false for use in a system wherein biometric data are stored in a database. The method comprises the steps of:

comparing data based on a biometric information sample associated with first data within the biometric data and the biometric data to locate second data within the biometric data that is indicative of a substantial match with the biometric information sample to provide comparison results; and,

when a comparison result is indicative of a substantial match and the second data is other than the first data, storing information in association with the first data the information indicative of the second data.

This passage is substantially the same as the language of claim 11 of Freedman. This passage and claim 11 clearly discuss comparison of samples taken from individuals other than the person to be authenticated but whose biometric information is similar to that of the identified individual in order to detect false matches. The passage at col. 3 is missing certain portions, which makes the meaning of the passage at col. 3 less clear. Specifically, the phrase "second data within the biometric data" at col. 3, lines 45-46, appears as "second data related to another individual within the biometric data" in claim 11. Thus, from claim 11 of Freedman, it is clear that the "first data" mentioned at col. 3, lines 43-52, is biometric information of a first individual, whereas, the "second data" mentioned at col. 3, lines 43-52 is biometric information of "another individual" indicative of a "potential false acceptance."

The Examiner, however, asserts that this passage of Freedman teaches “obtaining biometric samples from a person and when a positive comparison is made, baseline samples are collected.” The Examiner also asserts that this passage of Freedman teaches “adding addition[al] data to the baseline when comparison is indicative of a substantial match.” These characterizations are incorrect. Rather, as explained above, this passage of Freedman is directed toward comparison of samples taken from two different individuals that are indicative of a potential false match.

Thus, Freedman does not suggest or disclose the limitations of claim 29 that allow the baseline profile to evolve over time in response to changes in the person over time. Borza does not disclose this limitation either. This is another reason why claim 29 is allowable.

Claim 30 (previously claim 34) recites that “the baseline samples being collected while the person goes about his or her normal activities.”

This limitation is not disclosed or suggested by Freedman. The Examiner stated, however, that Borza teaches that baseline samples are collected while the person goes about his or her normal activities since “Retinal Scan described on Page 11, lines 18-22 can occur when user is either obtaining the time from looking at the watch or performing something as simple as trying to obtain information on whether he/she is being authorized by the device which can be considered normal activities.” (Emphasis added). Thus, the Examiner rejected claim 34 as being obvious over Borza in view of Freedman.

The Applicants respectfully disagree with the Examiner’s reasoning as applied to claim 34 (now claim 30). The Examiner reasons that because samples can be collected while the user goes about his or her normal activities that Borza teaches this limitation. As explained above in reference to claim 8, the Examiner is not applying the correct legal standard stated in Section 2112 of the MPEP. Rather, inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient to show that the thing is suggested or disclosed by the prior art. Accordingly, the Examiner’s reasoning does not support the rejection of claim 34 (now claim 30).

In sum, Borza does not provide any teaching of when or under what circumstances samples are obtained. Thus, Borza does not disclose the limitation of claim 30 in which samples are collected while the user goes about his or her normal activities, nor is this limitation inherent under Sections 102 or 103. Freedman does

not disclose this limitation either. For at least this reason, claim 30 is allowable over Borza and Freedman, taken singly or in combination. Claims 31-37 are allowable at least because they are dependent from claim 30.

In maintaining the rejection of claim 30 the Examiner states in the Advisory Action that the applicant cannot import limitations from the specification into the claim.

The Applicants respectfully disagree with the rejection. As is stated in the Manual of Patent Examining Procedure, Section 2111, the “PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.”

(Emphasis Added), quoting *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). The Applicant is not attempting to import limitations from the specification into the claims, but instead is attempting to explain the reasonable interpretation that must be given to the term “normal activities” taking into account the Applicants’ specification.

As required by the MPEP, the term “normal activities” as used in claim 30 must be interpreted in light of the Applicants’ specification. The Applicants’ specification at page 13, lines 12-17, explains that:

[S]amples may be taken over an extended period of time during which the user goes about his or her **normal activities**. For example, image samples may be taken when the wearer uses the device 100 to display time of day. In addition, voice samples may be taken during the normal course of the wearer speaking to others. For example, the user may speak his or her name when answering the telephone or making introductions to others.

(Emphasis added.) None of the examples given are of a person attempting to engage in authenticating themselves. Thus, from this passage and from the specification taken as a whole, it is clear that the type of activities that are considered “normal activities” in the context of claim 30 does not include a person attempting to authenticate themselves. Thus, the Examiner’s interpretation that “normal activities” includes a person attempting to authenticate themselves is not a reasonable interpretation.

In view of the above, claim 30 is allowable. Claims 31-37 are allowable at least because they are dependent from claim 30.

As in claim 29 discussed above, claim 38 recites updating the baseline sample by additional biometric data when the additional biometric data successfully authenticates the identity of the person. This allows the baseline profile to evolve over time in response to changes in the person over time. As explained above in reference to claim 29, Freedman does not suggest or disclose this feature, nor does Borza.

Regarding claim 38, the Examiner states in the Advisory Action that Freedman at col. 5, lines 45-66 teaches selecting the templates that best represent the unique biometric identification of the individual. Freedman does discuss selection of biometric fingerprint samples to serve as a sample reference. However, there is no teaching or suggestion in Freedman or Borza that the baseline sample is updated by the additional biometric data when the additional biometric data successfully authenticates the identity of the person, as required by claim 38. This feature achieves advantages unknown in the prior art; namely, that the baseline profile can evolve over time in response to changes in the person over time.

In view of the above, claim 38 is allowable.

New Claims

Claims 39-43 are new. Claim 39 is dependent from an allowable base claim 38. For at least this reason claim 39 is allowable. New claim 39 recites that the method of claim 39 is performed by a portable device. Support for this limitation can be found in the Applicants' specification at least at page 5, lines 10-23.

New claim 40 recites an apparatus for authenticating the identity of a person including means for obtaining an image of the user in response to the user accessing the apparatus for the time of day information. Thus, similarly to claim 8, new claim 40 requires that biometric information is obtained in response to the user accessing the apparatus for the time of day information. As explained above in reference to claim 8, this feature is not suggested or disclosed by the cited art. Accordingly, claim 40 is allowable.

New claim 41 recites that the user is required to press a button on the apparatus to receive the time of day information, new claim 42 recites that the portable device is wrist-worn and new claim 43 recites means for updating the

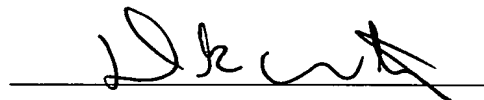
baseline sample by the additional biometric data when the additional biometric data successfully authenticates the identity of the person. These limitations are similar to those of claims 9, 10 and 29, respectively. New claims 41, 42 and 43 are allowable at least because they are dependent from an allowable base claim 41.

Conclusion:

In view of the above, the Applicants submit that all of the pending claims are now allowable. Allowance at an early date would be greatly appreciated. Should any outstanding issues remain, the examiner is encouraged to contact the undersigned at (408) 293-9000 so that any such issues can be expeditiously resolved.

Respectfully Submitted,

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